


New Product

3300/52 Reverse Rotation Monitor

The use of dry gas seals in industrial pumps and compressors has substantially increased in recent years. Though this type of seal does not require lube oil and is very reliable under normal operating conditions, its integrity is highly dependent on shaft rotation in the proper direction. Shaft rotation in the reverse direction, although a rare occurrence, can quickly lead to severe dry gas seal damage.

In hydroelectric, pumped-storage applications, reverse rotation is a normal operating procedure. In these and other applications, important trend information can be correlated with other measurement data for more effective decision making.

Bently Nevada's new 3300/52 Reverse Rotation Monitor provides an early indication of a reverse rotation event. Furthermore, peak reverse speed and the number of reverse revolutions can quickly be determined to help assess the severity of any damage. As with all 3300 System monitors, quality, reliability and flexibility are standard.

The monitor accepts inputs from two proximity probes observing a notch (see Figure 1). When rotation is in the forward direction, the notch is detected first by Transducer A and then Transducer B. Under the opposite scenario, a reverse rotation event is detected.

The Reverse Rotation Monitor also provides a separate rotative speed alarm setpoint for each direction of rotation. The forward speed alarm setpoint can be programmed to provide annunciation on increasing speed (over

alarm) or decreasing speed (under alarm). The reverse speed alarm setpoint is available for increasing speed only. Either speed alarm can activate the speed alarm relay.

Additionally, the monitor provides separate analog proportional recorder outputs for forward and reverse speed. The full-scale output of the recorders is configured separately for each direction of rotation.

Including the 3300/52 Monitor in your monitoring system offers valuable information to understand the operation of your machinery and, in particular, the condition of dry gas seals. With this information, machine operators can take informed corrective action to minimize costly seal damage or to replace the seals as needed. ■

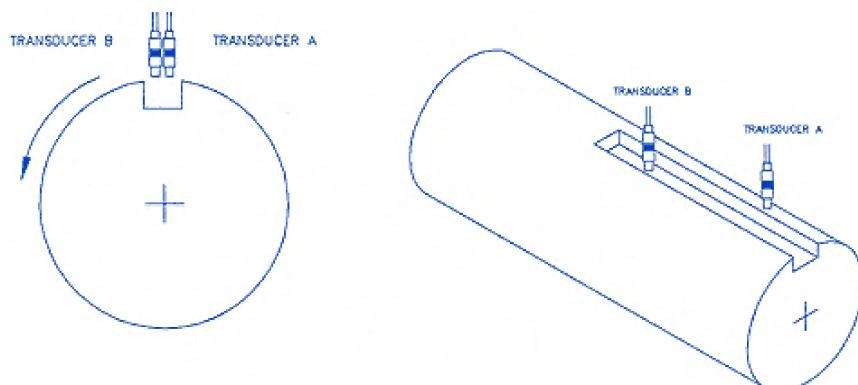
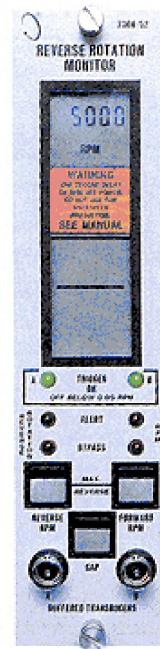


Figure 1

When rotation is in the forward direction, the notch is detected first by Transducer A and then Transducer B. The notch must remain in view of Transducer A when it rotates into view of Transducer B. Figure 1B shows the probes offset axially to obtain proper transducer spacing.